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EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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EDITORIAL NOTES.

Our Annual General Meeting will be held on Monday, and it is many years since a general assembly of the profession met under more critical circumstances. The busy practitioner we know can seldom afford a day from his practice, and urgent cases will always prevent some men from attending, but the occasion deserves an extra effort, and it may well be hoped that all who can will attend at Red Lion Square on Monday. The business is to adopt the Annual Report of the Council, and this gives the only opportunity in the year for the practitioner to mark his sense of the proceedings of the Council. It also affords opportunity for members to suggest subjects for future consideration. The matriculation scheme is still unsettled. The proposed new Charter has only reached the stage of a report from Committee. The relationship of the Examining Board to the Council on one side and to the Schools on the other, has only just entered upon the initial stage of enquiry. These are all questions upon which the thoughts of the profession should be concentrated, and opinions formed and expressed. The day has gone by when the whole duty of practitioners at the annual meeting was acknowledged to be a silent acceptance and adoption of the Council's report. The well-being of the Body Corporate is our highest interest, and apathy and indifference have given place to a lively interest in the progress of our common calling. We have awakened; and it only remains to guide and control our newly developed energies—this may be effected by every individual displaying his activity.

On Friday the scrutineers count the votes given to candidates for Council, and the result will not be known until Monday. Our hope and expectation is that the reform candidates will be returned by a large majority. From all parts of the country we hear of the greatest activity being shown, and the number of ballot papers returned this year will probably far exceed that of any previous election. The six candidates who signed a joint circular are unknown men in comparison with the four other gentlemen who form the list of nominations. If "the six" head the poll it will be a demonstration of the wishes of the profession that cannot be gainsaid. On the joint-circular solely their claim for election rests, whilst on the other side are all the influences of honoured names and great reputations. The result of this election will mark an era in our professional life—and the result is not doubtful.

The scheme inaugurated by the Worshipful Company of Farriers for the instruction and registration of Shoeing-smiths promises to be a great success. The members of the trade are coming forward from all parts to secure registration, and the Company has fairly started on its course of technical instruction. A course of lectures is being delivered in three different parts of London, and each course is well attended by the shoeing-smiths. Professor Pritchard has been chosen by the Company to carry out the instruction, and no better selection could have been made. He combines a practical knowledge of the work in the forge with the skill and tact resulting from twenty years' experience as a veterinary teacher. His audiences are large and most attentive, they exhibit a really enthusiastic interest in the subject, and the good which will be effected on the trade in London cannot be overestimated. Only one mistake seems to us to have been made by the organisers, and that is in not having enlisted the aid of the press. We have not seen a single press notice of the lectures as yet, and it seems a pity that the public should not be informed of the work that is being done. The owners and superintendents of horses require quite as much education on the subject as the workman—in fact a great deal more, for it is certain that in the Metropolis more harm is done to horses' feet by the farriers in carrying out stupid instructions than by any want of skill and knowledge on their part. The amateur farrier, whether he display his ignorance by writing nonsense in books or papers, or by insisting on his ideas being carried out in the forge, is the greatest curse to horse-shoeing in the Kingdom.

Prosecutions against veterinary surgeons are becoming alarmingly frequent. Of course where gross negligence is displayed no thoughtful man can object to a Court of Justice doing what is right to the offender. Unfortunately every client who sustains disappointment after purchasing an animal has the power to act upon his own view of what is gross negligence. He is controlled only by the possibility of the expense which may result from failure to establish his charge; and the uncertainty of the law, combined with the ingenious methods of solicitors often encourage him to believe that the expense will fall upon the other side. We all make mistakes; but if the public once adopt the idea that every time a veterinary opinion fails to be verified by events a lawsuit will enforce pecuniary recompense from the practitioner, we must carefully re-consider our position. A guinea fee is not a sufficient sum to make it worth while to face the possibility of one or two hundred pounds loss.

CASES AND ARTICLES.

THE THERMOMETER IN PLEURO-PNEUMONIA.

An article appeared in your issue of 18th inst, relative to the use of the clinical thermometer as an aid in discovering the existence of pleuro-pneumonia, in which the writer would lead one to suppose that the thermometer was the only safe and absolute guide to the detection of pleuro-pneumonia, and he goes on to suggest that an inspector should take the temperature of every animal at the time of his inspection of a byre within a scheduled district. This latter proposition is, I think, carrying his "fad" too far. Personally I consider the thermometer to be of the greatest assistance to the veterinarian, both in this and other diseases, but against such a statement as the above I must enter a protest, and I would ask "veterinary inspector" what possible end he would attain by taking the temperature of healthy animals—animals standing, masticating, and looking to be in perfect health? Again, presuming an inspector takes the temperature of a cow which has recently suffered abortion (and I presume he would do so as this is a very suspicious occurrence in a suspected area), would it be just on his part to go straight to a healthy in-calf cow, and make his thermometrical test? Would it be right to use his thermometer on healthy looking cows far advanced in pregnancy?

The inspector goes on to say that some dairymen are not capable of recognising the disease in any of its stages. Well, all that I can say is, that I doubt this assertion. May I remind the inspector that one of the first and best symptoms is that the animal has suddenly stopped giving the usual supply of milk. Is it possible that the cowkeepers cannot appreciate this? And in my opinion this symptom is previous to, or synchronous with the fever, as shewn by the thermometer.

I have noticed animals as being unwell, have taken their temperature, and found it normal. Auscultation has revealed abnormality of the lung; and the general appearance has aroused suspicion. I have watched such animals for a time, and they have developed into acute pleuro-pneumonia. If the indication, as revealed by the thermometer, was taken in these cases as an infallible test, such animals would be passed over.

"Inspector" rather neatly shelves the question raised by himself, "What of chronic cases?" and goes on to say that where a chronic case exists, "sooner or later" you are sure to get an acute case, But what of the great damage that may be done by leaving a chronic case of pleuro-pneumonia in a herd that may come in contact with a considerable number of animals during the summer months at grass? Another question to be raised is What of recovering cases? You may get a normal temperature, yet if you can recognise pleuro-pneumonia the case is evident.

There are a great number of animals suffering from diseases presenting symptoms very similar to pleuro-pneumonia, and in many instances it is not safe to give a differential diagnosis of these diseases in the living subject. I may mention acute and chronic tuberculosis, septicœmia, and pyæmia, with lung lesions (some cases of). The only difference to be noted is the general appearance of the animals.

In conclusion I say that the thermometer is an extremely useful aid to us, but I hold that experience and careful clinical observation are the only means by which we can attain a good knowledge of pleuro, and having this, an inspector making a careful examination, and keeping his eyes open and ears alert, need not fear passing a case of pleuro-pneumonia unnoticed. To inexperienced men I say by all means use your thermometer on all animals within a scheduled area, until you attain that knowledge which time, experience, and thorough clinical observation can alone bestow.

"Est Modus in Rebus."

DR. KOCH'S LYMPH AS A DIAGNOSTIC REMEDY FOR TUBERCULOSIS IN CATTLE.

By Professor B. Bang,
Of the Royal Veterinary College, Copenhagen.
Translated by N. Ustrup.

(Continued from page 536).

For want of space I could not house a great number of cows at the High-school or at the Laboratory, so I made most of the experiments at Copenhagen cattle market, where Mr. Möller, chief surgeon, kindly assisted me in procuring a stall and buying suitable animals. The measurements of temperature were executed with great care by Mr. Hviid, veterinary surgeon at the cattle market. The injections I made myself, and likewise the minute examinations of the carcases and intestines after the slaughter, which took place in the sanitary slaughter-house. I have at the cattle market experimented upon 15 head of cattle, viz: 8 cows from the age of $3\frac{1}{2}$—8 years old; one heifer 2 years old; one heifer 1 year old; one calf $4\frac{1}{2}$ months old, and four bullocks, namely, two 1 year old; one $2\frac{1}{2}$, and one 4 years old. I have at the High-school had 4 aged cows, 4 calves and 6 young pigs. Thus I have altogether tried the effect of the lymph on 22 head of cattle, the first cow inclusive, and 6 young pigs. At the cattle market I have mostly made the injection on the side of the neck, occasionally behind the shoulder.

When the skin is very thick it may be desirable to facilitate the introduction of the cannula by making a small incision to the deepest part of the true skin. I have always used an ordinary sized Pravaz syringe with glass walls and a partitioned piston. The lymph is not used unalloyed, but, as for human beings, diluted with carbolic-water of $\frac{1}{2}$ per cent strength. In the beginning I used dilutions of 1·100, but when larger doses have to be used, such weak dilutions are unpractical, as it renders repeated injections necessary, making the animal more

restless. Therefore I have latterly used stronger solutions. It is doubtless indifferent in what concentration the remedy is applied. Dr. Koch has made use of it unalloyed for injections on guinea-pigs, and Boeckl and Schütz employed it for cattle diluted with carbolic-water in the proportion of 1·9; I generally used dilutions of 1·27.

1st Experiment at the Cattle Market:—The 5th February, 8 p.m. I injected the lymph in doses 0·20 ccm. on 3 fat and apparently healthy animals, namely, 2 cows, 4 and 3½ years old (number 1 and 4) and one 4 year old bullock (number 3.)

	No. 1. Temp. Celsius.	No 2. Temp. Celsius.	No. 3. Temp. Celsius.
5th Feb. 8 p.m.	38·7	38·6	38·9
6th 6 a.m.	39·0	38·7	38·8
7	39·1	37·7	38·7
8	39·0	38·7	39·0
9	39·1	38·7	38·8
10	39·2	38·7	38·9
11	39·1	38·7	38·8
12	39·0	38·7	39·0
1 p.m.	39·1	38·8	39·0
2	39·1	38·8	38·8
3	39·0	38·8	38·8
4	39·2	38·6	38·8
5	39 1	38·7	38·8
6	39·1	38·7	38·8
9	39·0	38·7	38·8
7th, 6 a.m.	39·1	39·7	38·9
10	38·9	38·7	38·9
2 p.m.	38·9	38·7	38·9
8th, 6 p.m.	38·9	38·8	38·9
8 a.m.	38·8	38·7	38·8
11	38·8	38 8	38·9
2 p.m.	38·9	38·7	38·9
6	38·8	38·7	38·9
9th, 8 a.m.	38·8	38·8	38·9

Cow No. 1. In this showed 10 hours later the temperature appeared a trifle higher after the injection, viz: 0·3° and a few hours later it further rose 0·2°, and remained comparatively high the whole day, falling again the following days. This animal thus showed traces of re-action, but so slight that it would be of no importance in practice. However, when the slaughter took place, the 9th February, a.m., it appeared *that this cow was actually slightly affected with tuberculosis.* In one lung a small group of caseous tumours was found, the largest of them being almost as large as a nut; in the other lung, one similar, scarcely the size of a pea. Furthermore, in a bronchial gland, was a caseous tumour the size of a mustard seed, and in one of the lymph-glands above the pharynx several such the size of mustard seeds or hemp seeds, otherwise no tuberculous deposit was found.

Cow No. 2, was perfectly healthy.

The Bullock No. 3, was likewise perfectly healthy with the exception of a tumour the size of a pea, which was found in the top part of the left lung. which consisted of a dry caseous mass, surrounded by a fibrinous membrane, apparently an old concluded process. By microscopical investigation of the mass of this tumour I only found two tubercle-bacilli, and in another none at all. By the table of temperatures it may be seen that the bullock the day after the inoculation showed a very slight increase of temperature, but so trifling that it is best to disregard it and so say, that the remedy given in *the dose quoted* was not capable of showing the presence of an exceedingly small, old tubercle.

2nd Experiment at the Cattle Market:—The 12th February, 8 p.m. the remedy was injected, also this time in doses of 20 ccm. on 4 young and fat beasts, namely, 2 bullocks about 1 year old (No. 4 and 5) and 2 heifers, 1 and 2 years old (No. 6 and 7).

	No. 4. Temp. Celsius.	No. 5. Temp. Celsius.	No. 6. Temp. Celsius.	No. 7. Temp. Celsius.
12th Feb. 8 p.m.	39·3	39·0	39·3	39·1
13th, 6 a.m.	39·3	38·9	38·9	39·0
7	39·3	39·0	39·2	39·0
8	39·3	39·1	39·0	39·0
9	39·3	39·3	39·0	39·1
10	39·4	39·7	38·9	39·0
11	39·3	39·7	38·9	39·7*
12	39·4	39·8	38·9	39·0
1 p.m.	39·3	39·7	39·0	39·0
2	39·4	39·7	39·1	39·0
3	39·4	39·7	39·0	39·1
4	39·5	39·6	39·0	39·0
5	39·3	39·4	39·0	39·1
6	39·4	39·6	39·0	39·0
9	39·3	39·4	39·0	39·0
14th 7 a.m.	39·3	39·0	38·9	39·0
11	39·2	38·9	38·7	38·9
2 p.m.	39·2	39·0	38·7	39·1
6	39·2	39·1	38·8	39·2
15th 8 a.m.	39·2	38·9	38·9	39·3
11	39·1	39·0	38·9	39·5
2 p.m.	39·1	38·9	38·9	39·9
6	39·2	39·0	38·7	41·3
16th 7 a.m.	39·2	39·0	38·7	40·5
10	—	—	—	40·1

It appears from the list of temperature No. 4 and No. 6 showed but trifling variations. No. 5 showed the day after the injection a rise of temperature, which even reached 0·8° with a maximum at 39·8°. No. 7 showed (regardless of the one probably wrong measurement at 11 o'clock) no rise of temperature the day after inoculation. The third day after the inoculation the temperature rose to a considerable height, from which it, the fourth day, fell considerably. There is scarcely any reason to connect this late rise of temperature with the injection, no doubt it must have been accidental. †

* This measurement is most probably wrong, as it is likely that the observer has omitted to shake down the quicksilver of the maximum-thermometer after the measurement of the animal No. 5, which was done just before this.

† The heifer was pregnant with a half-grown embryo. had eaten weil and had not had diarrhœa. Pathologico-anatomical changes which indicated any definite malady I did not find.

On dissection the animals were found to be free from tuberculosis. I had expected that bullock No. 5 would have been slightly affected with tuberculosis but I found no traces of it, yet it must be remarked that I neglected to have the vertebræ sawn through, so that it may be possible that it had a tuberculous malady in it, which is not uncommon in cattle. Regardless of this possibility we must by this experiment conclude that a decisive diagnostic importance must not be ascribed to a *slight* rise of temperature. It must be borne in mind that the temperature of the cattle can vary much, even under conditions where there is no reason to suppose sickness present. At those experiments which Dr. Krabbe in 1871* made on a number of apparently healthy cows he found variations of temperature between 38° and 40°, while the mean temperature of most of the healthy cows is supposed to be 38·8°, not till it rises over 40° may we venture to say for certain, that it is over the line for physiological variations.

3rd Experiment at the Cattle Market:—The 16th February, 5 p.m. the lymph was injected in doses of 0·30 ccm. on four apparently healthy and well-fed but rather aged animals, viz: 3 cows, 4, 5 and 8 years old (No. 8, 9 and 10), and a bullock 2½ years (No. 11).

		No. 8.	No. 9.	No. 10.	No. 11.
16th Feb.	5 p.m.	38·9	39·2	38·9	39.1
	7	38·9	39·1	38·9	39·1
	9	38·9	39·2	39·0	39·2
17th	6 a.m.	38·8	39·2	41·2	40·1
	7	38·9	39·1	41·2	40·2
	8	38·8	39·2	41·2	40·2
	9	33·8	39·1	40·9	40·3
	10	38·7	39·0	40·6	40·5
	11	38·7	39·0	40·6	40·4
	12	38·7	38·0	40·3	40·4
	1 p.m.	38·7	39·0	40·4	40·4
	2	38·8	39·1	40·7	40·4
	3	38·7	39·0	40·5	40·4
	4	38·8	39·0	40·3	40·3
	5	38·9	39·0	40·1	40·3
	6	38·7	39·0	39·7	40·1
	9	38·8	39·0	39·7	39·8
18th	8 a.m.	38·7	38·9	39·5	39·2
	11	38·9	38·9	39.3	39·1
	2 p.m.	38·8	38·9	39·1	39·5
	8	38·9	39·0	39·2	40·1
19th	8 a.m.	39·3	38·9	39·1	39·2

A glance at this list shows that the temperature of the two cows, No. 8 and 9, had varied but little. *They were also* on being slaughtered *perfectly healthy.* *No.* 10, an aged but tolerably well-fed cow, which, however, showed slackness in the ligamentum latum pelvis, a sign of being a roarer or growler† showed on the contrary 13 hours after the injection* a very considerable rise of temperature, namely, 2·3°, from 38·9°—41·2, the temperature remained above 40° during the subsequent 11 hours and then gradually to sink nearly to its normal state. When slaughtered this cow showed, spread in both lungs a considerable number of tuberculous formations, viz: partly dry caseous tumours from the size of a pea to that of a bean, and partly minute tuberculous caverns. On the pleura a single fresh pearl-tumour, the size of a small wafer. In the bronchial glands a few coagulated (caseous) corns, the lymph-glands of the mediastinal membrane were rather enlarged with small caseous tumours, likewise in the lymph-glands of the liver-hilus a few tubercle-tumours; the glands of the pharynx and mesentery were healthy. In one of the lumbar-vertebræ appeared a pretty large tuberculous infiltration and a small abscess. *Thus this cow was affected with a rather extensive if not very considerable tuberculosis.*

The Bullock No. 11 showed at the same as the cow a rise of temperatuie of 1° to 1·4°, and again the next day a slight increase towards evening. On being slaughtered it appeared that *the animal really suffered in a very slight degree of tuberculosis.* In one of the lymph-lands over the pharynx some small caseous tumours were found, and in the long lymph-gland in the hind part of the mediastinum a caseous tumour the size of a nut. Furthermore in one lung were found 1 or 2 small tubercles, and in two of the mesentery glands were found tumours the size of a nut. *Thus the remedy had plainly disclosed the presence of a slight tuberculosis, about whose existence none of the methods of examination hitherto known would have been able to give the least information.*

4th Experiment at the Cattle Market:—The 19th February, 5 p.m. Injected four beasts, viz: 3 cows 6, 7 and 8 years old (No. 12, 13 and 14), and 1 calf about 2½ month old (No. 15). The cows had 0.30 ccm. each, the calf only 0·20.

		No. 12.	No. 13.	No. 14.	No. 15.
19th Feb.	5 p.m.	39·1	38·7	40·7	39·4
	7	38.9	38·6	40·7	39·4
	9	38·8	38·7	40·8	39·5
20th	6 a.m.	40·5	40·8	41·1	39·3
	7	40·4	41·1	41·0	39·2
	8	40·3	40·4	41·3	39·3
	9	40·1	40·0	41·2	39·3
	10	40·2	39·7	41·1	39·2
	11	39·7	39·6	41·0	39·3
	12	39·6	39·6	41·0	39·3
	1 p.m.	39·5	39·5	40·9	39·4
	2	39·6	39·3	41·2	39·3
	3	39·5	39·1	41·0	39 4
	4	39·2	39·0	41.1	39·4
	5	39·1	39·0	41·1	39·3
	6	39·0	38·8	41·0	39·4

* Tidsskritt for Veterinairn, 1871.

† This appeared, as a rule, to depend upon the presence of cysts in the ovary.

* The rise of temperature has no doubt been present before 6 a.m., but at the experiments at the cattle-market I could not have the measurements done during the night. Traces of increase were already observed after four hours' time.

		No. 12.	No. 13.	No. 14.	No. 15.
21st	9 p.m.	39·0	38·7	41·0	39·4
	8 a.m.	39·0	38·8	41·0	39·4
	11	39·1	38·8	41·3	39·4
	2 p.m.	38·9	38·7	41·1	39 4
22nd	6	39·0	38·7	41·0	39·4
	8 a.m.	39·0	38·6	41·3	39·3
	11	39.0	38·6	41·3	39·3
	2 p.m.	39·0	38·7	41·4	39·4
	6	38·9	38·6	41·6	39·4
23rd	8 a.m.	39.0	38·6	40·9	39·3

All 3 cows were lean and gave signs of being affected with tuberculosis.

No. 12 appeared to be least affected, it did not cough and no râle was heard in the lungs, but the percussion souuds were moderated towards the back part and down the right lung.

No. 13 coughed a little, the stethoscopic examination did not show anything plainly abnormal, but one of the lymph-glands above the pharynx was considerably swollen, as it can be in ordinary tuberculous lymphatic-glands-abscesses in this place (the so-called lymphoma). Above the udder, which was apparently normal the lymph-glands were felt to be considerably enlarged.

No. 14 was unmistakably tuberculous in a high degree; the percussion sounds moderate, and the respiration bronchial on a part of the chest downwards behind the right shoulder. The respiration was raucous with prolonged expiration over the greatest part of both lungs, but only few râle sounds were heard. The cow had a frequent feeble and almost toneless cough. This cow was not very suitable for experiment as it was feverish already before the injection, having a temperature of 40·7°, but the day before this when it was bought it only had a temperature of 39·2°.

The Calf No. 15 was apparently healthy. The list of temperature shows that *the calf* did not react at all after the dose, which was rather large in proportion to its age, namely, 0·20 ccm. *On being slaughtered the calf was perfectly healthy.*

The Cows No. 12 *and No.* 13 had a perceptible re-action, the temperature 13 hours after the injection rising to 1·5° and 2°, in No. 13 it even rose a little more by the next measurement. Yet in both of them it lasted only 4 to 5 hours until it had sunk under 40 * and before evening it was again normal, remaining so during the following 2½ days in which the beasts were observed. When *No.* 12 was slaughtered it was found to have a good many medium-sized tubercle-knots—the so-called pearl-knots—on the right lung, and a large tumour of the same quality on the right pleura costalis, on its lower part. In the right lung were found some bronchiostasis and some parts of the lung were consolidated. Furthermore, large caseous tumours in the bronchial and mediastinal glands, and small ones in a pair of the mesenteric glands and in the lymphatic glands about the pharynx. Extended tuberculosis in the mucous-membrane of the uterus. Numerous echino-coccus in the liver and lungs.

The Cow No. 13 showed but slight tuberculosis of the lungs, but the bronchial and mediastinal glands were swollen and contained cementing masses as large as nuts; similar deposits were found in a single mesenteric gland. In the right lymph-gland of the pharynx a large tuberculous abscess, in the left gland was found small spread tubercle-tumours and one small abscess. In both lymphatic glands above the udder large tuberculous abscesses; the udder apparently healthy.

The Cow No. 14 had after the injection a perceptible increase of the previous present fever, the temperature remaining very high till it was slaughtered, even reaching its greatest height 3 days after the injection. Strange enough the cow continued to eat and ruminate. When slaughtered a quantity of caverns were found in both lungs and great masses of tubercle-nots (the so-called pearl-nots) on the pleura. Moreover, very large caseous-calcinated tumours in the lymphatic glands above the pharynx, in the lympatic glands in the thorax and the abdominal cavity; immense tuberculous sores in the intestinal tissue, and extended tuberculosis in the uterus and in the both gartner's ductus * of the vagina.

Neither in this case nor in any of the others have I in a *pathologico-anatomical* respect found *important exceptions* from what is otherwise found in tuberculosis. Perhaps the pus in the caverns and in the uterus was a little thinner and more mucous than usual, but still it was in a very slight degree. Now and then I have got the impression that there was more hyperœmia around the tuberculous tumours in the lungs than is usually seen. In the tuberculous lymph-glands I have not seen anything greatly varying from what is usual.

* Also called wolffi-ductus.

(To be continued.)

* It must not be omitted to notice that the rise of temperature had probably set in during the night.

THE TEACHING AT OUR COLLEGES.

By William Penhale, Barnstaple.

There are many, I think, who will not agree with all the remarks made in a recent number of our valuable and much-prized *Record*, as to the subjects taught at our Colleges, and the quality of some of the teachers. Surely it cannot be wrong to engage as instructors in certain branches of science gentlemen who have thrown their whole energy, ability, and time in acquiring a knowledge of a subject until they have become specialists, and even original in their particular line. Their lectures must be of more value, of greater weight, and convey far more meaning to the mind of the student than those from men who have a smattering of knowledge, and a little general information on almost everything. How much more prized on a diploma the signatures of a Volcker, Bentley, or Flower, than that of a moderate and almost unknown man. On general and practical subjects it is all right enough to have general and practical men.

May I here say that I hope the day is not far distant when the Governors of the College will see their way clear to the acquiring of a large farm where domestic animals may be bred and reared. Then the student will have an opportunity of observing their habits, instincts, and ways, and know at a glance when the animals which the public will expect him to know so much about, are well or ill, if they are perfectly nursed and cared for, and the ordinary signs of parturition. Is it possible that anyone can know and be conversant with all the details of animal life unless he has been sometime on a farm? And how can one who has scarcely ever been in a cow-shed express an opinion on the construction of a building, and the matters of light, space, drainage, and ventilation? Far better that students should be compelled to spend their time there than roaming about the Modern Babylon, with its all too alluring attractions. A farm properly managed need result in no pecuniary loss to the Governors.

Then again, I think the censure on the teaching of Botany should never have seen the light of a public press. in this, our day. With our patients almost all entirely herbivorous, what can be more important than a study of the class of food they eat, the way in which it grows, the nature of the plants of which it is composed. which the most palatable, and the most nutritious. Hundreds of animals die annually from eating poisonous plants; the flavour and quality of the milk when cows are at grass depends on the character of the herbage. Epidemics of abortion also are constantly occuring from diseased grasses.

The education of a Veterinary Surgeon should certainly enable him to make a thorough and competent inspection of the pastures of a farm, and have a knowledge of every plant he sees, and to be able at once to tell the good from the deleterious. In these days, when South Kensington is teaching science in almost every cottage; when the County Councils are spending enormous sums in spreading clinical education; and courses of University extension lectures are regularly given, appreciated, and well attended throughout the Country; when Geology, Chemistry, Optics, Physiology, and nearly all the sciences are the constant thought and conversation of our artisans, surely it is no time for the provincial veterinary surgeons, at any rate, to remain merely and only in a valley of dry bones.

In large towns perhaps it is not so necessary that the practitioner should be so well informed, but in the country where we are in constant touch and conversation with our clients, I can assure you, Mr. Editor, it is no use to lag behind from lack of information on such every-day matters as Bacteriology and Botany.

The Pasteur Institute—The report has just been issued of this institute for 1890. It shows that of 1,546 persons treated for hydrophobia, only ten died. The cases included bits by cats, dogs, and wolves.

Royal College of Veterinary Surgeons.

FELLOWSHIP DEGREE.

An Examination for the above Degree was held on the 28th January, when the following gentlemen were admitted Fellows of the Royal College of Veterinary Surgeons.

J. Laithwood, Esq., Congleton, Cheshire.
R. Porch, Esq., Bristol.

EXTRACTS AND NOTES.

ALLEGED STARVATION OF HORSES.

The R.S.P.C.A., *v.* E. J. Sewell.

(Continued from page 543.)

Walter Boswell, M.R.C.V.S., said—I saw seven horses on February 6th, at the stables of the Junior Army and Navy Stores. They had been returned from Mr. Sewell's infirmary the previous day. I saw they had been treated for some skin-disease which would partially account for the poor and emaciated condition they were in. I have never known animals suffering from skin disease get into such a condition if they were properly fed. I made a post-mortem examination on a dark chestnut mare at the knacker's yard. The cause of this animal's death I conclude was want of sufficient food, as there was not a particle of fat on the bowels or in the abdomen. The stomach and intestines were a very dark slate colour, which is an indication of poorness and poverty. I did not find any organic disease to account for death. There was food in the stomach, undigested, but well masticated, which is an indication that it was given too late. There were no fæces in the rectum, there would have been had the horse been regularly fed. I saw other horse's at Mr. Sewell's stables in Crescent Mews and Feltham Mews. At the latter stable the doors were dilapidated, there were very few mangers, but the place was in order as far as litter being laid down. The horses were in poor condition. I have never heard of a horse dying from the effects of mange only. In my opinion those animals had been suffering from starvation and neglect. At Crescent Mews I saw a bay mare in slings. She was said to be 18 years old, and was poor and weak. Her bones were prominent and there were sores on the head. She was feeding off the ground.

Cross-examined:—The horse on which I held a post-mortem was old. If it had been suffering from mange for weeks, and was of weak constitution, the severe cold would not have helped it. Its internal organs were healthy, but horses dying of sheer debility or exhaustion would not show any disease.

Professor Pritchord re-called, said in reply to the Magistrate, that when he first went to the stables the horses he saw had no rugs or any covering. Some were tied up but some were walking about loose. In cold weather it would be desirable to put some clothing on horses suffering from skin-disease, but under ordinary circumstances it is desirable not to cover them.

George Reddish said—I am a veterinary surgeon, and made a post-mortem examination of a horse with Mr. Boswell. I heard Mr. Boswell's evidence and I agree

with him that the indications were those of death from want of food. I saw no organic disease, and I have never known horses reduced to such a condition as this by mange alone.

Cross-examined :—The absence of fœces in the rectum might be caused by the last evacuation. In the first portion of the small intestine there was food. The sores on the skin I should think were caused by the horse being unable to rise, and struggling. If a horse died from exhaustion and sheer debility I should expect to find nothing more than what I saw. I say, on oath, there was no hair on this horse except the tail and mane. If a horse had been suffering from mange for some weeks I should expect to find it weak and exhausted; it would probably get worse and die, but not from mange alone.

Re-examined :—If mange were neglected and the horse were not properly fed, it might die, but if it were properly fed it would not die.

The Magistrate :—You seem to put it altogether on the feeding. If mange goes on for a long time and is not attended to, a horse may die from it?

Witness :—I think not.

The Magistrate :—Would it get worse?

Witness :—If it were not attended to.

The Magistrate :—Could it go on getting worse for weeks?

Witness :—No.

Samuel Bignold, M.R.C.V.S., said—I saw these horses on February 11th. I saw seven horses at Jermyn Street, all of them in a most emaciated and disgraceful condition. Two in particular could hardily get out of the stable. I found no constitutional disease to account for their condition. I have never known a case of mange properly fed and well-treated to be reduced like these—they often get fat. I went to Crescent Mews, there was no window in the place, and the door was locked, but I could see a horse through the grating in the further corner. I went to Feltham Mews. It is a totally unfit place for an infirmary. I have seen the horses since—probably a week later than my first examination. I detected a decided improvement in them.

Cross-examined :—I cannot say how long I have known Mr. Sewell. I have seen him about. I was never friendly and never unfriendly with him. Up to 1886 I had never spoken to him, since that year I have not been on worse terms with him. (Letter handed to witness). This is my hand writing; it says "You ought also to give me a good commission for the clients you have taken from me after having seen their patients on my behalf." Now my memory is refreshed, I can say I treated that matter with more contempt than ill feeling. I did not treat Mr. Sewell with contempt (another letter of similar import was put in).

Francis Ridler, M.R.C.V.S, said—I saw these horses on February 13th at Jermyn Street. There were seven, and five of them were much emaciated. They were young horses and I detected no organic disease. I have never known a case of mange properly fed in a warm stable and properly treated being reduced to the condition these horses were in. I have known horses suffering from mange keep their condition.

Cross-examined :—I never heard of horses dying from mange. The irritation soon subsides if properly treated. To treat a horse properly would take at least a week. I cannot understand a horse being at Mr. Talbot's for six weeks with mange. I can stop the irritation in twenty-four hours. If a man knows his profession he can soon allay irritation.

John Roalfe-Cox, F.R.C.V.S., said—I have practiced forty years. I am an ex-president of the College and a member of the Board of Examiners. I agree with the last witness that the irritation from ordinary mange can soon be allayed. It is necessary to a cure that the animal should be well-fed and in a warm clean stable. I have never known a horse to be reduced to emaciation by mange alone if properly treated. I have known them keep their condition. It is not right to keep horses with mange so that they are able to lie on the bare floor. On February 18th I inspected eleven horses at the Junior Army and Navy stables, which had been returned. Some of them were fit for work—three were fit for work—three for light work—and five were unfit.

Cross-examined :—Some of the horses bore signs of having had skin-disease but were cured. Some horses suffer far more severely than others, and those who had it badly would, in course of time, probably become debilitated. Mange associated with some other disease might lead to death.

The Magistrate :—The severe weather we had in January might increase the difficulty of recovery?

Witness :—It would.

George Williams, F.R.C.V.S., said—I am veterinary surgeon to Her Majesty, and have had considerable experience of mange. I do not agree that it is a disease which throws animals off their food. If horses with mange are properly treated I should not expect to find them much reduced in condition in a month or even two months. They might even improve because of the rest and good feeding.

Cross-examined :—I do not say that if they had mange very badly they would gain flesh. A great deal depends on circumstances. I agree, as a rule, that the irritation of mange can be easily allayed.

James Irvine Lupton, F.R.C.V.S., said—I have been in practice over thirty years. I am a government veterinary inpector. In my experience animals affected with mange, if properly treated and fed, certainly ought not to be reduced to a condition of debility and emaciation. Dirt, unsanitary conditions, and want of food accentuate and emphasize the disease.

James Macqueen :—I am a Professor at the Royal Veterinary College and have had considerable experience of mange. I have heard the evidence of last witness and I agree with it. I have never known a horse reduced to emaciation or in condition, when properly fed, from mange alone. If horses affected only with mange got very emaciated I should conclude that they were suffering from want of food most likely—and the irritation. I have had many cases of mange in which I have had to advise that the horse be destroyed, but then it was due to neglect—the surroundings were not healthy, and there was want of care and food.

Cross-examined :—Horses do not sleep with mange irritation. The irritation may last for weeks or even months if not properly treated. Even with treatment it may last for days. I have had cases of sarcoptic mange lasting for weeks. I never saw an animal so affected which went off its feed.

Henry P. Talbot said—I had charge of these animals up to December 31st, before they went to Mr. Sewell's. Just before that time I had three horses belonging to the Stores brought to my infirmary. One was suffering from mange, the other two from influenza. Before they left my premises as cured I requested that they should be taken back as I considered them fit for work. I next saw two of them on February 11th, they were the horses that had influenza, the one that had mange I never saw again. It was a gray, and was cured when it left me. The condition of the two was very bad. I should say they had recently recovered from some skin-disease which they had not when they left me. If horses are properly fed and treated mange alone does not cause emaciation.

Cross-examined :—I do not mind one bit having lost this work. If a client goes away I do not run after him especially when without cause.

Charles Humphreys :—I am engaged at Feltham

Mews. My uncle keeps a stable opposite Mr. Sewell's. I saw Mr Sewell at the stable every day. I saw the first seven horses in the stable frequently. I once saw them fed, they had half-a-sieve of chaff each. I saw them standing without bedding. After the Society's Officers came some straw and hay came. I saw it come once before that. There are not any iron mangers at Feltham Mews. I do not think any alterations have been made in the stable since the officers interfered.

Inspector McCullogh said—I am an officer R.S.P.C.A. I was a farrier-major in the Army for many years, and in that capicity had a large experience of horses, but I have seen very little mange—only one case. I went to Feltham Mews on February 3rd. I saw eight horses, there were six stalls and two horses stood without stalls. They were grays and the mare was eating the tail of the gelding. I saw not a particle of food or bedding. In the loft there were seven trusses of hay also some oats, some chaff and a sack of bran. The floor was very irregular and stank of the urine. When the horses were offered a bit of hay they ate it ravenously. There was no rug on them, and they were dressed with some mixture like sulphur and oil. Three of them were most emaciated—a black gelding, a bay gelding and a bay mare were worst. The doors of the stable were closed, and there was no ventilation, the stench was awful. There were no iron mangers, some were zinced over, but they were all gnawed away and the bottoms out. There were no mangers from which the animals could eat, I next went to Crescent Mews. Some of the animals were loose, and one was tied up to the wall with a rope or chain to keep it on its legs. There was no bedding. One mare was in slings, she was most emaciated. In this stable there were three iron mangers and there were six horses standing the best way they could. The stable was in a most insanitary condition. In the loft I found five trusses of hay but not a particle of straw. The floor was filthy. On Feb. 9th I saw Mr. Sewell at his residence and told him I thought he was greatly to blame for the condition of the horses. He said "they have plenty to eat, each horse gets half a gallon of corn in the morning and hay, a similar quantity of bran and chaff at mid-day and the same quantity of corn at night with hay. They have all had mange, and were bad before I got them. You must know that is a disease which will wear a horse to death. Their skins are so tender they cannot lie down, and some refuse their food altogether. They are kings to what they were. They are all fit to go away now." I said "How about the one in slings and the two that died," he replied "we cannot help that." I said "I have seen some that can scarcely walk, let alone go to work." Mr. Sewell replied "nonsense man, I have had four veterinary surgeons to see them and they agree with me that they are in good condition considering the lowering nature of the disease."

(To be continued).

*SWINE FEVER,

By Mr. Sanders Spencer, Holywell Manor, St. Ives.

I do not think it is necessary for me to attempt to minutely describe the symptoms, the virulence, or the dire result of, and arising from, a serious outbreak of swine fever. All these are, I fear, only too well known to many persons in this county, which has furnished quite its share of outbreaks to the records published by the Veterinary Department. I will, therefore, endeavour to lightly touch on the subject from an historical and one or two other points of view, and then make a few suggestions as to remedial or other measures.

In the States, a most interesting and somewhat keen correspondence has taken place between two scientists, one of whom declares that the disease which is known in the States as hog cholera is 'only partially like the German rothlauf, in that there are two distinct forms of hog cholera in America. On these various points there may be enough of uncertainty to afford our scientific men an immensity of work in the laboratory and in the press, but the English, French, and German names respectively of purples, rouget and rothlauf are so peculiarly alike, and the results on the pigs from an attack of either disease so exactly similar, that for all practical purposes we may class them as one disease, whilst the term hog cholera is so expressive of one of the chief symptoms of our swine fever that American hog cholera may, I think, also be included. As to the further question, whether swine fever be indigenous to the country or an imported disease, it is impossible to obtain any reliable information, but of one thing we are positively certain, and that is we have in former years imported hog cholera from America, rouget from France, and rothlauf from Germany or other foreign countries, and the results are that for years our herds of pigs have been decimated by disease or diseases of a most contagious and infectious nature, and that the small farmer, the labourer, and the artizan have suffered severely from the loss of their pigs, whilst pig-keepers of all degrees have been heavily handicapped in the production of the most profitable meat to manufacture from cheap imported corn, and also prevented from enriching the English soil at no expense by the use of foreign corn. Although it may be impossible to definitely fix the peried when swine fever was imported into England, yet we are able to discover when the disease had become so serious as to attract attention. This was about the year 1864. For some two or three years previously there appears to have been several outbreaks of the disease in Berkshire and one or two adjoining counties, and it had extended during the summer of 1864 as far north as Edinburgh, being carried there by pigs bought in Staffordshire. These diseased pigs in the north appear to have come under the observation of Professor Gamgee, who wrote to Dr. Budd, of Clifton, stating that "a very remarkable and fatal outbreak of true typhoid fever in swine had occurred among pigs in Edinburgh." From this we may take it for granted that swine fever was at that time unknown in Scotland. One of the pigs which had died was forwarded to Dr. Budd, but, on account of the hot weather at the time, when the pig arrived Clifton it was in an advanced state of decomposition. But Dr. Budd was not to be deterred by small difficulties; he made a *port mortem* and satisfied himself that the distinctive ulcers of the disease were present. In the early spring of 1865 Dr. Budd had a fine opportunity to thoroughly study the disease, since the pigs at the Clifton workhouse were found to be affected with swine fever, and were rapidly dying off. During the continuance of this outbreak Dr. Budd appears to have made such good use of his opportunities as to enable him to obtain sufficient material for a lecture which he delivered at a Council meeting of the Royal Agricultural Society. In this lecture, of which an account is published in the society's journal for the year 1865, we find well-nigh all the information we at present possess concerning swine fever: its symptoms, incubatory period, and the *port mortem* appearances, &c., &c. It is true that Professors Simonds and Gamgee were also at the time working in the same direction as Dr. Budd and that Professor J. Wortley Axe thoroughly investigated a serious outbreak near Bath, in 1875. and made some most valuable experiments, but all these tended rather to confirm the conclusions at which

[* A Paper read on March 21st, 1891, before the Norfolk Chamber of Agriculture.]

Dr. Budd had arrived, than to furnish any new and separate information on the subject. Since that time but little further practical knowledge of the disease appears to have been acquired. It is true a theory has been started that pigs which have apparently recovered from swine fever are liable for some considerable time to retain the power to infect healthy pigs with which they may come in contact. I do not contend that I have proof positive that apparently recovered animals are dangerous, but at all events facts furnish a strong argument in favour of the compulsory slaughter of all diseased animals.

We have had compulsory slaughter of the diseased and in-contact animals, infected places and areas of varying sizes declared, markets, sales and even shows prohibited, compensation paid and left unpaid—adjoining counties, and even a borough in a county, having two different sets of regulations—isolations of affected and infected animals, leaving the diseased animals to drag out a miserable existence for an indefinite period, and thus becoming a plague spot, dangerous to all their porcine neighbours; indeed, almost every plan has been attempted except a thorough and successful one.

Thus far my task has not been of a particularly severe character, but the difficulties multiply as quickly as do the microbes in the body of a swine fever-infected pig when it is attempted to answer the question—What suggestions have you to offer? In what way would you proceed to eradicate, or, failing this, to curtail swine fever? I fear that I have nothing new to recommend, or, at all events, no suggestion which some person or other may not imagine to be his sole idea and property. My first proposal would be that the Agricultural Department should be empowered to act with swine fever as with pleuro-pneumonia, and as the Government has acted with respect to cattle plague and foot-and-mouth disease. It appears to be impossible to make two elected bodies of Englishmen think or act alike. Then we have conflicting any varying interests. In one county may be a port from or to which large numbers of stock are shipped, or a local authority may be possessed of a large market, which is the chief source or cause of business in the district. Again, in one district the breeding of pigs for sale may be principally followed, whilst in another the fatting of pigs on the bye products of the dairy may be profitably pursued. In one county you may find on the Contagious Diseases Committee one or two thorough business men of more than average knowledge of the contagious diseases amongst stock, and with them you will find observant and energetic officers; whilst in the adjoining county exactly the opposite prevails. The natural result of such a state of affairs is that the officials in one county will be mainly employed encountering the cases of disease introduced from the neighbouring but ill-managed county. I am strongly in favour of uniform orders all over the country. No one who has not experienced it, would believe the immensity of the trouble and annoyance caused by the ever-varying and contradictory orders issued by some of the local authorities. If we really expect to get rid of swine fever we must submit to the compulsory slaughter of all diseased pigs, and all those which by any means have been exposed to infection, the disease being both contagious and infectious, and the virus of so deadly a nature that it is simply impossible to rid our herds of swine fever unless every possible host of the microbe is slaughtered. As these steps are taken in the interest of the public generally, it is only fair that compensation to the owner should be paid from the imperial funds. As to the amount of the compensation, this might vary, but in every case where the owner has given evidence of a desire to act in a straightforward manner, I would meet him in a liberal spirit, whilst in those cases which are likely to occur so long as human nature is constituted as at present, when attempts at evasion are made in various ways, such as buying doubtful pigs and placing them with sound ones, witholding notices for a time for certain purposes, &c., I should feel inclined to treat such cases on their merits, as I would where the pigs have been recently bought. I would also suggest that the limit of the amount of compensation is much too low. I would make the maximum £6 for a healthy pig and £3 for one affected, instead of £4 and £2 as now. As soon as possible after an outbreak of swine fever has been certified by the veterinary inspector, it is desirable that an infected area should be declared, the area to extend to at least a mile from the location of the outbreak, and from and into this infected area no live pig should be allowed to be moved for a fixed period after the last of the diseased or infected pigs should have been disposed of and styes thoroughly disinfected. On the question of the duration of this period there may be differences of opinion. I would suggest at least twenty-eight days. It is true that the incubatory period of swine fever is very short, from five to ten days. Any further cases of disease would, therefore, soon be discovered. But, on the other hand, we must not forget the unfortunate amount of vitality possessed by swine fever virus. It has the greatest possible objection to become a thing of the past, and is not at all particular as to its habitation. This is one of the reasons why the most thorough disinfection is imperative. This leads us to the question of the inspection of pigs at markets, fairs, and auction sales, and the disinfection of the places where these are held. In some parts of the country these matters are not satisfactorily dealt with; the veterinary inspector is paid but a very small sum annually, which in many cases he accepts solely for the reason that he is aware that a competitor in the neighbourhood would be glad to accept it, in order to obtain a footing in his brother vet's preserve. In many cases the natural result follows: the veterinary inspector gives the authorities credit for having taken advantage of his position, and, therefore, he is at liberty to give them, at all events, no more than money's worth. The consequence is that doubtful and diseased animals sent for sale are disposed of at some price or other, and the disease distributed in a wholesale manner. Besides this trouble of insufficient payment of some of the veterinary inspectors, there is, I fear, in a few cases, a still worse one—a want of knowledge and care amongst some of those appointed. There is not the slightest doubt that each year hundreds of reported outbreaks of swine fever are nothing of the kind. I would make it obligatory on every veterinary inspector to make a *post-mortem* before the case is declared to be one of swine fever; and, further, I would allow any owner who was dissatisfied with the decision to be at liberty to send, at the public expense, a portion of the intestines of the pig to the Royal Veterinary College to be reported upon.

Another most important matter is the tracing out of every outbreak. It is a moral certainty that if this were promptly and thoroughly done it would be found in every outbreak that some one or more persons had broken the law, and were thus deserving of sharp treatment. If one or two of those miserable specimens of humanity were made acquainted with the inside of a gaol, or even heavily fined, swine fever would almost die a natural death, since without the virus which has been released from a diseased pig it is impossible to produce the disease. Swine fever cannot be manufactured, however filthy and unsanitary the pig-styes may be.

It has also been reported that in some districts the dealers' carts are not often cleansed and disinfected. This is a matter in which the dealers are personally and directly interested, so that one would think it was only needful to point out to them the desirability of it, and it would be attended to without the aid which

the law gives in the form of compulsion and fines in cases of refusal or inattention.

Various points in the paper elicited commendatory expressions, and Mr. Spencer resumed his seat amid loud applause.

Mr. CLARE READ then moved the following resolution: "That this chamber considers that immediate steps should be taken by the Board of Agriculture to stamp out swine fever, and is of opinion that the best method for doing so is to deal with it in the same way as pleuro-pneumonia, cattle plague, and foot-and-mouth disease."

THE VETERINARY FACULTY OF McGILL UNIVERSITY.

The convocation of the Faculty of Comparative Medicine and Veterinary Science of McGill university was held on March 31st.

Promptly at three o'clock Mr. J. W. Brakenridge, B.C.L., registrar of the university, entered at the head of a procession including the Chancellor, Sir Donald A. Smith; the Vice-Chancellor, Sir William Dawson; Dr. D. McEachran, dean of the Faculty of Comparative Medicine and Veterinary Science; the professors of the faculty and the members of the Convocation and the graduating class.

The Chancellor having taken his seat called upon Professor McEachran, dean of the Faculty, who delivered a very short but pithy address. In the course of his remarks he pointed out that the accumulation of wealth marked the progress of a nation, and that McGill was rapidly becoming famous abroad, as he had observed during his travels. To what more useful purpose could our merchant princes put their money than to endow a seat of learning? McGill had much to be thankful for in this respect, but the Faculty of Comparative Medicine had been left to struggle alone He then went on to show the importance to the human race of the prevention of diseases among animals, since we derive the greater part of our food from that source.

He then read the list of prize winners, who were called up and presented with their prizes by Sir William Dawson.

Dr. J. W. Gadsden, M.R.C.V.S., said: I have had excellent opportunities for six years past of knowing the nature of the work being done by the Montreal Veterinary College, having for that time occupied the position of one of the examiners in the practice of medicine and surgery.

I wish to say that I have noticed with considerable surprise, the fact that this faculty, second in importance both commercially and scientifically to no other faculty in the university, should receive no aid to enable it to carry on its good work. As an inducement for others to do something towards helping on the progress of comparative medicine, I beg to say that I have spent 33 years of my life in the active practice of the profession, during which time I have accumulated a library and private museum of considerable value As I am now about retiring from practice, I have much pleasure in presenting both to this faculty, the only condition I ask being that they be kept intact and form a part of the library and museum of this faculty.

The Chancellor said he had great pleasure in introducing his friend, the Member for Montreal.

Mr. Curran, Q.C., M.P., who was loudly applauded, said that he remembered the time, and that not so long ago, when there was no Veterinary College in Montreal, when the only depositories of the art curative for dumb animals were the Swinburns, the Masons, his own grandfather and his father, and one or two others, men who had brought from the Old Country a knowledge of splints, spavins and ringbones, and some recipes for the less complicated diseases. This faculty, now associated with the McGill University, had a very humble beginning. Sir William Dawson and the late Dr. Campbell, had given their powerful patronage to that indefatigable worker for Canadian interest, their present dean, Dr. McEachran. (Applause.) In 1875 the present building, now altogether inadequate, had been erected by their dean at his own expense, and it was not too much to say that his name would ever be connected with the rise and progress of this faculty of McGill college as its founder and fostering parent. (Applause.) The results of the labours of the dean and his associates were before the people of Canada. In 1876 when disease broke out in Great Britain amongst the live stock, it was due to his representations that the order-in-council of that year was passed by the Dominion Government, limiting importations of Cattle into our country to the ports of Halifax, St. John, N.B., and Quebec, and establishing a quarantine that had saved one of our greatest sources of wealth from destruction. (Applause). If our cattle are not scheduled to-day it is due to the men formed in this school who have been able to carry out the Government regulations with scientific precision.—*The Montreal Gazette.*

ACTION BY A VETERINARY SURGEON—IMPORTANT DECISION.

On Wednesday, April 15th, at the Cork Quarter Sessions his Honor the Recorder gave an important decision in the case of James W. H. Ashe, V.S., plaintiff; Surgeon-General Thomas Tarrant, defendant.

This was an action for £1 4s. 6d., being a guinea as fee for the examination of a horse, and 3s. 6d. keep of the horse. Dr. Ashe was entrusted by Dr. Cremin, of Cork, with a grey pony to sell by auction. At the sale 19½ guineas were offered, but at this sum Dr. Cremin refused to part with the animal, whereupon the defendant purchased the horse for 20 guineas. The animal was kept on the night of the sale at the plaintiff's establishment. The defence was that the horse had a "curb," and was unsound when purchased, and that therefore, plaintiff was not entitled to the fee for examining the animal, which he pronounced sound.

His Honor gave a decree for the amount and costs, on the ground that a veterinary surgeon was only bound to pass a horse as sound to the best of his skill and judgment, and even if he made a mistake he was entitled to his fee.

THE FRENCH SURGICAL CONGRESS.

On March 30th the fifth French Surgical Congress, which is still in progress, was opened by an introductory address from the President, Professor Guyon. There was a very large attendance of surgeons, both French and foreign. In the earlier part of the proceedings the surgery of the brain and spinal cord occupied the place of honour. On March 31st Mr. Boyce, of University College, in the absence of Mr. Horsley, who was unable to be present, described that gentleman's method of trephining in focal epilepsy and in cases of cerebral tumour, showing photographs and specimens illustrating the incision, the size of the flaps and of the pieces of bone removed, the method of determining the situation of the Rolandic line, etc. A summary of Mr. Horsley's results was given from the *British Medical Journal* of Dec. 16th, 1890; to that list two further successful cases had now to be added. In discussing the time at which surgical interference should take place in the case of tumours, Mr. Horsley said that expectancy and medicinal treatment should never be prolonged beyond six weeks. Even when it was impossible to remove the growth, improvement in the symptoms often followed operation, owing to the removal of the compressing substance. In one case, after exploratory trephining, a tumour ceased to grow, and became atrophied. A partially successful case of trephining for Jacksonian epilepsy was related by Dr. Jeannel, of Toulouse. One case of compression by effusion of blood, and one of traumatic epilepsy were mentioned by Dr. Duret, of Lille; trephining had been successful in both, but in the former case the patient was seized with acute cerebral congestion on the 23rd day, after a drinking bout, and died with convulsions of all his limbs. Dr. Girard, of Grenoble, related a case in which an epileptic woman shot herself in the right temple with a revolver; trephining was performed, the bullet and some chips of bone were removed, and the skin wound stitched up, no drainage tube being left in; healing was complete on the seventh day, and for five months the great epileptic crises have ceased, attacks of vertigo have become rare, and consciousness has only been lost once. Menstruation, which formerly was almost constant, is now regular In fact, the operation which was undertaken for the injury seems to have cured the epilepsy. Dr. Reynier, of Paris, brought forward the case of a girl, aged 10, who was the subject of a cystic tumour situated at the lower extremity of the pre-Rolandic sulcus, and extending into the grey matter. M. Charcot having diagnosed "partial sensori-motor epilepsy corresponding to a probable lesion of the middle and lower parts of the Rolandic convolutions," trephining was performed on August 19th, 1890, but it was found impossible to remove the whole tumour. A second attempt on December 15th was more successful, and the child is now practically cured, no epileptiform attacks having occurred since December 22nd. A case in which a serous cyst of the brain was successfully removed was related by Dr. E. Doyen, of Rheims, and another in which a cerebral abscess following a gunshot wound was cured by operation was communicated by Dr. Picqué, of Paris. Dr. A. Broca discussed the general indications for trephining, excluding the immediate effects of injury. Dr. P. Michaux, of Paris, related a case of non-traumatic meningeal hæmorrhage, due to alcoholism or uræmia, which he cured by trephining. M. Lannelongue presented a communication on craniectomy in microcephalus in backward children, and in young subjects presenting various symptoms of cerebral disorder, with or without epileptic crises, based on twenty-five cases, of which twenty-four were "operative cures;" there was one death from acute septicæmia. As to the definitive results, in a very large proportion of the cases there was improvement both in the intellectual power, and in the power of walking. Cases of craniectomy were also related by Drs. M. Anger (of Paris), G. Maunoury (of Chartres), and De Larabrie (of Nantes), and Dr. Toison (of Douai), described some experiments made by him on "temporary resection" of the skull. Professor Verneuil related a case of old-standing fistula of the sacral region, giving issue to cerebro-spinal fluid; and Dr. Bazy (of Paris) described a case in which he had opened the spinal canal, with the object of relieving pressure on the cord. The operation, which was performed on November 9th, 1886, seven months before Mr. Horsley's first case, was, according to M. Bazy, the first of the kind on record. The patient was a lady, aged 45, in whom the cauda equina was compressed by a hydatid cyst, causing motor and sensory disturbances in the lower limbs. The patient died three weeks after the operation of nephritis, but nothing is said as to the effect of the surgical interference. M. Bazy operated again in a case of a very obscure nature, on October 2nd, 1888, but the result was negative.—*British Medical Journal.*

URQUHART'S HORSE-SHOE PADS.

The merits and advantages of "Rubber" horse-shoe pads are sufficiently established to need no introduction. Their value in cases of corns, sprained tendons, and diseased feet is appreciable; but their services in lessening concussion, and in prevention of slipping, although more difficult to appraise, are also unquestionable. Amongst the several makes that have been offered to the public during the last few years, few have held their place so well as Urquhart's, and deservedly, if quality in material and thoroughness in workmanship count. There are many reasons why we cannot describe the process of manufacture, but as the first is that we do not know, it is unnecessary to give others. The art of cementing rubber to leather is a secret, and each manufacturer has his own method. When horse-shoe pads first came into use, and for a year or two afterwards, every one experienced the annoyance of the rubber becoming detached. Mr. Urquhart was no exception, and the loss and trouble he sustained thereby were sufficient to have made a man give up trying in despair. The only effect on him was to produce a feeling of dogged resolution expressed by the remark, "I *will* succeed." He has done so, and his experiments, after entailing losses of leather and rubber valued at hundreds of pounds, leave him in the present position of having discovered a method of cementing rubber to leather unequalled by any other manufacturer. It requires a good judge to understand the various qualities of leather and vulcanised rubber. Articles made of these materials which to the uninitiated look about the same, differ in cost to an enormous extent. The best material costs more than double the inferior; and nothing is more creditable to Mr. Urquhart than the fact that he has never allowed the possibilities of extra profits to induce him to use anything but the best material. His pads are well made, of the best rubber and leather, they are always reliable in wear, and in proportion to

the quality are the cheapest in the market. To instance their popularity we may mention that one London firm takes 30,000 yearly, whilst a large number of the "Frog" pattern are exported to France, Germany. America, India, and Australia.

After several changes to meet the necessities of his growing business. Mr. Urquhart has recently acquired premises adjoining his old established forge—for Mr. Urquhart is a practical farrier, and one of the best in London—and has re-built and added, the result being two large, light, roomy floors, capitally fitted to carry on his pad manufactory on an extended scale.

On the second floor is a long row of iron presses for moulding and setting, with the requisite furnace grate and troughs, and a 1 h.p. horizontal "Otto" gas engine (indicating 3 to 3½ h.p.) of the newest pattern, driving the cutting and rolling machines on the lower floor. On the first floor besides the rolling and cutting machines, and the necessary benches. are the offices and store rooms. Leather and rubber are expensive materials. One by no means imposing press, measuring perhaps 9ft. by 9ft. by 2ft., contains, when full, one thousand pounds worth of pads; but, said Mr. Urquhart, "that does not happen often, we don't get the chance." The ground floor is arranged as stabling; adjoining is the forge. The arrangements throughout are well planned, and carefully carried out. The setting of the engine, which, though on an upper floor, runs with literally no vibration; the ventilators—tne business is rather a smelly one; the drainage. with the modern "inspection chamber," all bear the stamp of that thoroughness which has gained for Mr. Urquhart so prominent a position in the pad manufactory.

To offer comment on the following Professional Card would be like painting the Lily.

W. ROGERS,
M.R.C.V.S.,
VETERINARY SURGEON,
164a, NORTH END ROAD,
WEST KENSINGTON.
(Late of 115 New Road. Whitechapel Road).

Inventor and Professor of Electricity for the Horse, &c.

Human Subject 2/6, Horse or Cow 5/-, Sheep, 1/- each.

Electricity is the best remedy for all diseases and lameness in the Animal Kingdom.

W. R's Tubes for Roaring Horses will be found the best invented.

I think if I had been sent over to the Emperor of Germany at the first he would be alive now.

Pleuro among American Cattle.

In the House of Commons on Monday night, Mr. Leng asked the President of the Board of Agriculture whether he was aware that Dr. Wray, a representative of the U.S. Bureau of Animal Industry in this country, had disputed the alleged cases of contagious pleuro in American cattle landed at Deptford, and asserted that eminent British authorities agreed with him that the animals were only suffering from catarrhal pneumonia, and whether any further information could be given to the House respecting these cases. Mr. Chaplin: No, sir, I am not aware that Dr. Wray has disputed the cases of pleuro landed at Deptford, and asserted that eminent British authorities agree with him. I have no information on the subject beyond an extract from the New York paper, which the hon. member has been good enough to send me himself. I may perhaps mention that, in addition to the expert of the Board of Agriculture, the lungs have been seen by Professor Walley and Professor M'Fadyean, both eminent authorities, and members of the Edinburgh Veterinary College, and also by Mr. Holman, an officer of the Board at Deptford, who has had over thirty years' experience of the examination of Foreign cattle. None of these gentlemen, I am informed, has the slightest doubt upon the subject.

CORRESPONDENCE.

TECHNICAL EDUCATION.

Broadclyst Technical Education Committee have resolved to apply to the County Council for a course of lectures in the ensuing autumn on "Our farm animals in health and disease." This subject was supported by Dr. J. Scanlan, Sub-Dean Acland, Rev. R. H. Hands, and others, and was only adopted after considerable discussion, as the subjects mentioned on the circular were considered unsuitable for agricultural districts. It was hoped that this course would be granted, and given by a competent veterinary surgeon. The cookery class scheme was discussed and a committee formed to manage details.

SIR,

The desirability of securing a New Charter for the redress of existing grievances in our body corporate has been engaging the major portion of our spare time and thoughts of late, but it is equally important for us to maintain a vigilant watch on matters likely to prove detrimental to the profession from a pecuniary point of view. By the enclosed extract from the *Western Morning News* you will gather certain inhabitants of a village are about to petition the County Council for a series of lectures to be delivered by a competent veterinary surgeon on "The Animals of the Farm in health and disease," and it is only reasonable to presume the medicinal treatment of common ailments of stock will be included under this category. If this appeal be granted I fear the authorities will experience but little difficulty in procuring the men they require for the purpose.

What with the abundance of cheap literature scattered broadcast in our various agricultural papers (written for the most part, I believe, by members occupying the highest positions in our profession), the various medicine chests (with the gratis advice of qualified men) and quack nostrums, the struggle for existence has indeed become very keen, and if such a proposal be universally adopted the poor country practitioners will soon sink into oblivion.

No reasonable objection could be entertained to a course of lectures being instituted on such important subjects as the "Breeding, Rearing or Improvement of our Live Stock," and in these is ample scope for the most ambitious of our agriculturists, but I sincerely trust veterinary surgeons will resist such proposed infringements of their rights and a procedure that must culminate in disastrous effects upon the future welfare of the profession. Yours faithfully, DEVON.

COMMUNICATIONS, BOOKS, AND PAPERS RECEIVED:—Messrs. S. Villar, V. Nivit, W. Penhale, "Excelsior," "Veterinary Counter Practice," "Royal Cornwall Gazette," "The Norwich Mercury."